

(No Model.)

W. H. DURANT.

HANGER FOR EQUALIZING LEVERS OF CAR BRAKES.

No. 584,758.

Patented June 15, 1897.

Fig. 1.

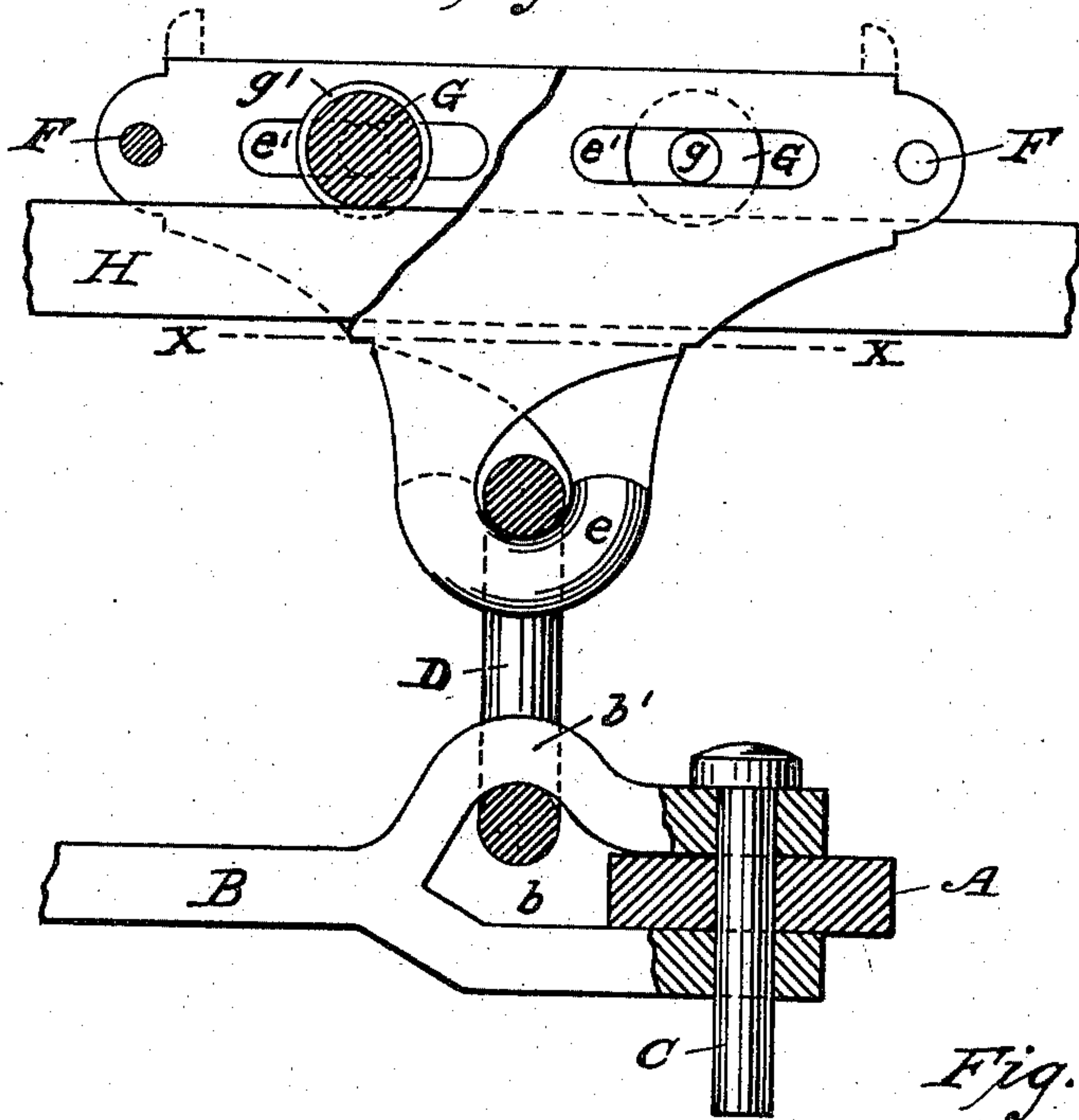


Fig. 2.

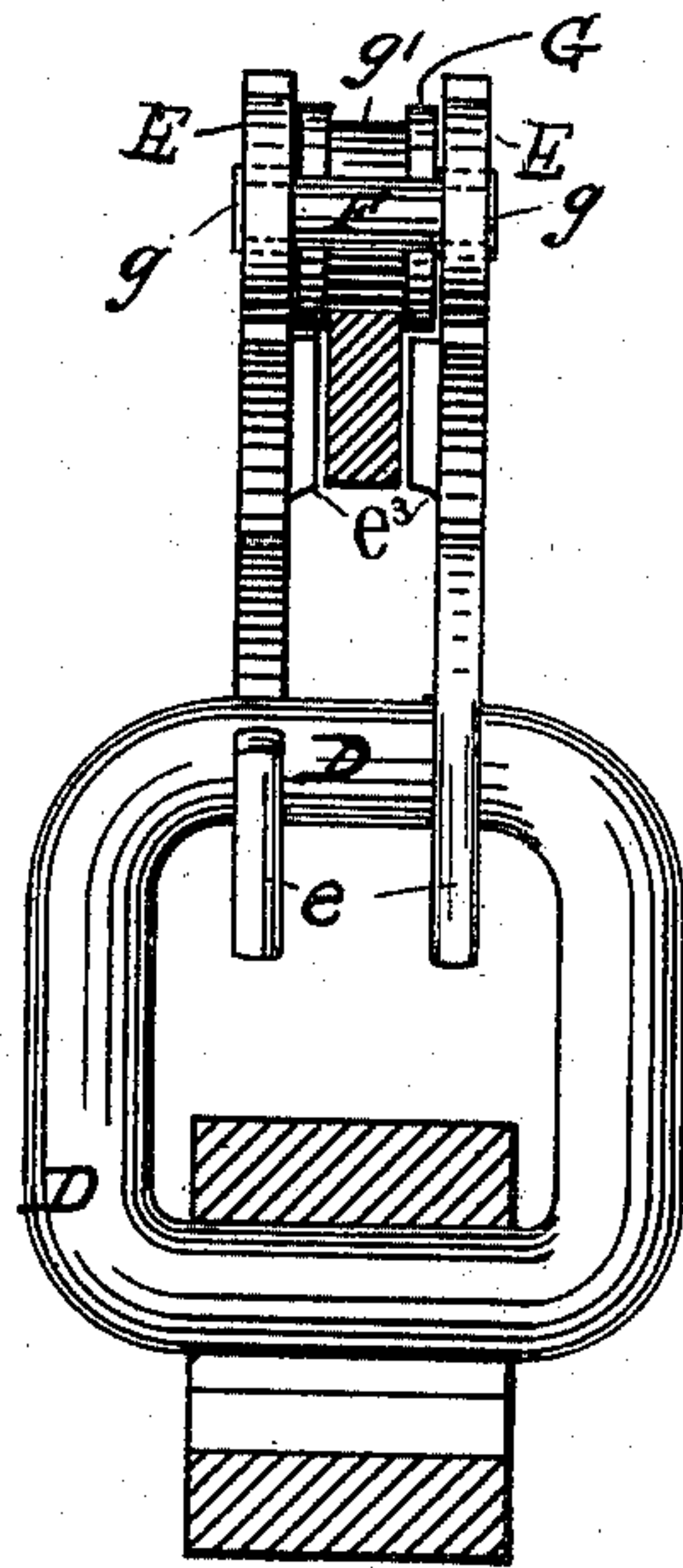
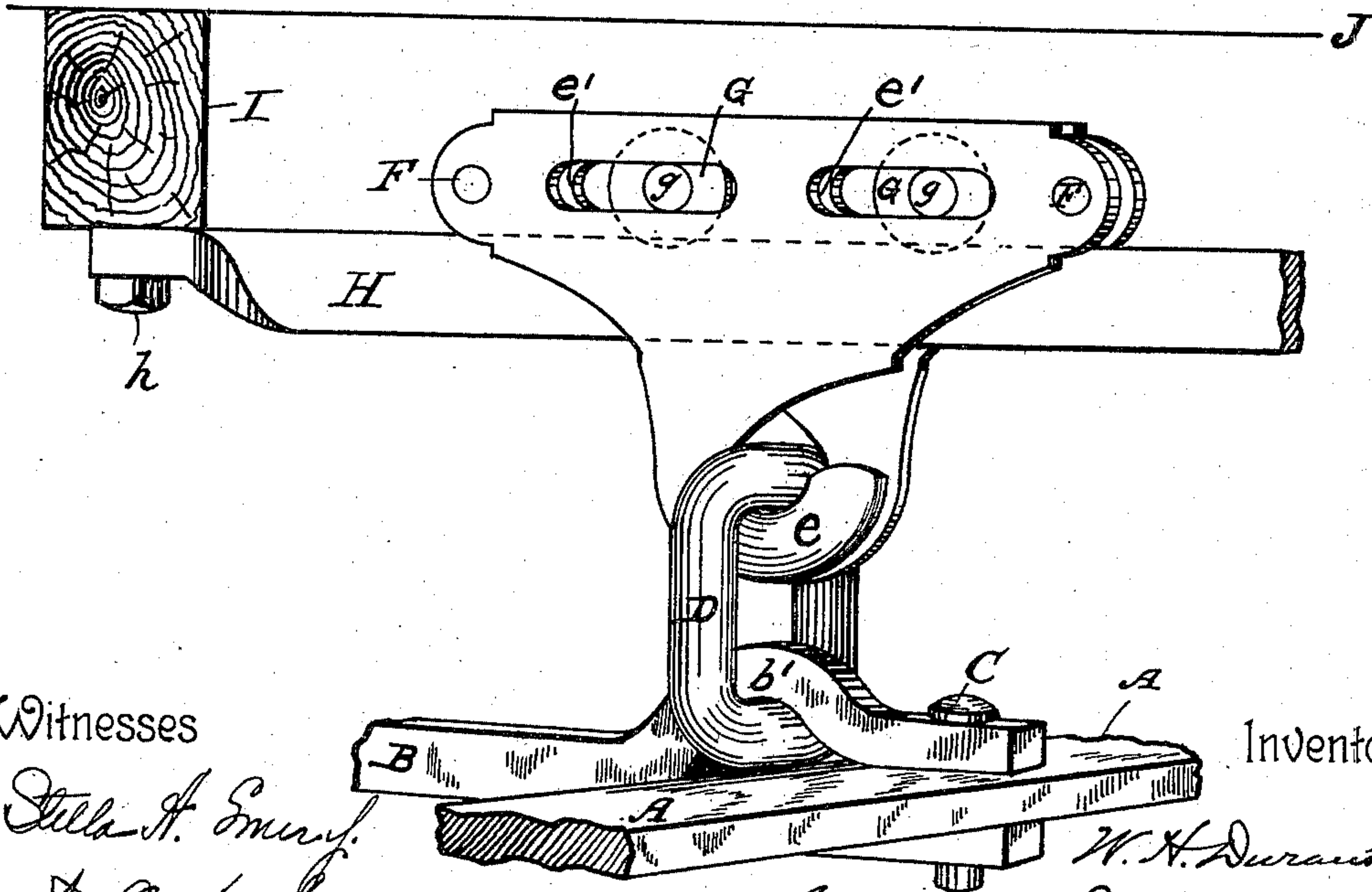


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM H. DURANT, OF CONCORD, NEW HAMPSHIRE.

HANGER FOR EQUALIZING-LEVERS OF CAR-BRAKES.

SPECIFICATION forming part of Letters Patent No. 584,758, dated June 15, 1897.

Application filed April 4, 1896. Renewed December 3, 1896. Serial No. 614,383. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DURANT, a citizen of the United States, residing at Concord, in the county of Merrimac and State of New Hampshire, have invented certain new and useful Improvements in Hangers for the Equalizing-Levers of Car-Brakes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Heretofore the equalizing-lever, which is usually pivotally mounted within a jaw formed for this purpose upon a guide-rod, has been supported by means of a link, one end of which is carried in said jaw and the other being supported by and upon one or more bars or rods underneath a car, the necessary forward-and-backward movement of said equalizing-lever, caused by setting the brakes, being permitted by a movement of the link in either direction upon its supporting-bars. The friction of the link when scraping backward and forward upon said bars is considerable, and so, also, is the noise occasioned thereby; and the object of the present invention is to produce a movable hanger for the equalizing-lever which will so reduce the friction as to be practically noiseless.

The invention will be fully set forth in the following specification and claims and clearly illustrated in the drawings accompanying and forming a part of the same, of which—

Figure 1 is a longitudinal sectional elevation showing the supporting-bar carrying one of my improved movable hangers supporting the equalizing-lever by the ordinary link. Fig. 2 is a sectional elevation of the same parts. Fig. 3 is a broken elevation showing the equalizing-lever with my improved connections complete.

Similar reference-letters denote corresponding parts in all the views.

A represents the equalizing-lever; B, the equalizing-lever rod, having the ordinary jaw *b*, within which is secured said lever A by means of the stud C. Before placing the said lever in position the ordinary link D is inserted within the jaw *b*, which rests normally in the upper curved portion *b'*, the top of said link resting upon the hooks *e* of the duplicate sections E composing my improved

carrier or movable hanger. My improved hanger may be made of any metal desired, but I prefer, for the purposes of economy, to form it of malleable iron, each section being cast from the same pattern and secured together by the studs F, thus causing the hooks *e* to turn in opposite directions and permitting the link to be as easily attached and detached as though the hooks were both turned the same way, while at the same time preventing the accidental displacement of said link.

The sections E are provided near their top with horizontally-elongated openings *e'*, which form bearings for the journals *g* of the rolls G, said rolls being preferably grooved on their periphery, as at *g'*, to receive the rods or bars H, upon which they are mounted and upon which they run or play back and forth by the action of the equalizing-lever when the brakes are set.

The rod or bar H is secured at its ends by suitable bolts *h* to cross-beams I, one of which is shown, and which may be fastened between the longitudinal sills of a car under the car-floor, which is represented in Fig. 3 by the line J.

I do not confine myself to the particular form for the castings E, which may be readily made to serve the purpose of a movable carrier for cylinder-levers by providing upon their top suitable stops *e''*, as shown by dotted lines in Fig. 1, in which case the castings may be cut off at the broken line X, also shown in Fig. 1. The rolls G may be run in fixed bearings, while still retaining the essential features of my invention.

A boss or projection *e'''* is formed upon the sections E, as seen in Fig. 2, which serves as guides for keeping the annular grooves of the rolls in engagement with the rod H.

Having described my invention, what I claim is—

1. In car-brake mechanism, a movable carrier or hanger having rolls journaled in and near its upper edge, an equalizing-lever connected to said hanger, and a rod or bar secured underneath the floor of a car upon which the rolls of said hanger revolve when the brakes are operated.

2. In car-brake mechanism, a movable carrier or hanger provided with rolls journaled

in and near its upper edge having an annular groove in their periphery, an equalizing-lever connected to said hanger, and a rod or bar secured underneath the floor of a car formed
5 of the proper width to fit the grooves in the rolls of said hanger and upon which said rolls may rest.

3. In a car-brake mechanism, a movable carrier or hanger provided near its upper edge
10 with longitudinally-elongated openings, rolls having an annular groove in their periphery and journals adapted to run in said elongated openings, an equalizing-lever connected to said hanger, and a rod secured underneath
15 the floor of a car and adapted to fit the grooves of said rolls which may revolve thereon by the action of the brakes.

4. In car-brake mechanism, a movable carrier or hanger formed of duplicate sections
20 riveted or otherwise rigidly fastened together having each near its upper edge longitudinally-elongated openings and at their lower edge a hook, rolls having an annular groove in their periphery and journaled in said elongated openings, an equalizing-lever, suitable

means for connecting said lever to the hooks of said hanger, and a rod secured underneath the floor of a car and adapted to fit the grooves of said rolls which revolve thereon while the
brakes are being set.

5. In brake mechanism, means for the noiseless automatic adjustment of the equalizing-lever consisting of a carrier for said lever, rolls journaled in said carrier, and a rod or bar secured underneath the floor of a car and
35 adapted to carry said rolls.

6. In brake mechanism, means for the noiseless automatic adjustment of the equalizing-lever consisting of a carrier for said lever having longitudinally-elongated openings on
40 opposite sides, rolls having journals fitting said elongated openings, and a rod or bar secured underneath the floor of a car and adapted to carry said rolls.

In testimony whereof I affix my signature
45 in presence of two witnesses.

WILLIAM H. DURANT.

Witnesses:

J. B. THURSTON,

H. E. ANDREWS.